



THOMAS G. NEWMAN,  
EDITOR.

Vol. XXV. Feb. 16, 1889. No. 7.

## EDITORIAL BUZZINGS.

**To Cure a Cough,** roast a lemon very carefully without burning it; when it is thoroughly hot, cut and squeeze into a cup upon one-quarter of a pound of extracted honey. Take a tea-spoonful whenever the cough is troublesome.

**A Fine Photograph** of the exhibit of J. P. Caldwell, of San Marcos, Texas, is on our desk. It shows his bee and honey exhibit at the International Fair and Exhibition at San Antonio, Texas, from Nov. 13 to 22, 1888. It must have been a great attraction.

**A Frame Lifter** is received from B. E. Foster, of Utica, N. Y. It is made of the best spring-steel wire forming a semi-circle; the ends of the wires form a kind of tweezers which hold the frame securely near each end, and it is lifted with the wire bow-handle.

**Farmers' Institute.**—The Newaygo County, Mich., Farmers' and Bee-Keepers' Association will hold their annual institute at Fremont, Michigan, on next Tuesday and Wednesday, Feb. 19 and 20, 1889. In the programme we notice the following: "The adaptability of bee-keeping for the farmer," an essay by A. M. Alton. Mr. Geo. E. Hilton is the Secretary.

**The Tenth** annual meeting of the Ontario Agricultural and Experimental Union, at the Ontario Agricultural College, was held at Guelph, on the 7th and 8th inst. By the programme we notice that Mr. R. F. Holtermann, an ex-President of the Union, is to deliver an address on "Bee-Keeping as a Branch of Agriculture," in the afternoon session of Thursday.

**Another Lie Hunted Down.**—Mr. L. W. Baldwin, of Independence, Mo., on Feb. 4, 1889, writes as follows:

A few days ago, while taking orders for comb honey in Kansas City, the proprietor of a store wanted to know if it was pure or manufactured. I told him that all comb honey was pure, as it was impossible to make the comb and fill it and seal it over. He said he *knew* they did it, for he *had seen them doing it*.

I told him that I did not like to dispute a man's word, but I was very sure he was mistaken, and if he would give me the address of the firm, I would prove to him that there was nothing in it. The man that is said to make the comb honey is D. B. Scully, Lake St., Chicago, one of the largest syrup dealers in the city. Now, Mr. Editor, if you will call there and see what there is in it, you will confer a favor on a honey-producer, and a store-keeper who is deceived by the lie of Prof. Wiley.

Of course the hunt turns out as usual. We went to the place indicated, and found a large wholesale and retail syrup and jelly house. Mr. D. B. Scully was not in, but his brother was found. After asking many questions about honey, syrup, jelly, etc., we inquired what honey they dealt in, and ascertained that they obtained their honey from California by the car load—that it was extracted honey, and that they did NOT DEAL IN COMB HONEY AT ALL! They had not a pound of comb honey in stock, and never thought of such a thing as making it themselves!!

Mr. Baldwin can, therefore, inform the Kansas City merchant that he was totally mistaken in this matter—notwithstanding his boast that he *knew* that honey-comb was manufactured, and that he *had seen it done*!!

Press him to name the place or back down; show him Prof. Wiley's retraction as published in the BEE JOURNAL for June 13, 1888, on page 388, where the Professor acknowledged that he "did not believe that it was possible commercially to imitate the comb!" Tell him that a thousand dollars await the proof of the manufacture of comb honey, offered by Bro. A. I. Root!

Every bee-keeper should appoint himself a committee of one to hunt down these lies about manufactured honey; and in doing so, will find the hearty approval of all honest men. Apologists for such infamies should hide their heads in shame, for they will certainly be crushed by the triumphant car of truth and justice, as it moves on to victory!

**The Mating of Queens.**—J. B., of Missouri, asks the following questions:

The queen-bee flies out to mate; is it impossible for her to mate in the hive? Does she not leave the hive by a law of nature, that she may not mate with her own family? If so, if that necessity is obviated, can she not be bred to mate in the hive? I read several bee-papers and books, but I have never seen anything touching on this.

No. It is natural for a queen to mate on the wing, and not in the hive. It is quite unlikely that fertilization in confinement will ever be successful, even though it may be very desirable on some grounds.

**Honey as a Cure for Colds.**—In the December number of the *Revue Internationale*, of Nyon, Switzerland, is a recipe for the use of honey as a medicine, which Mr. Charles Dadant has translated for the AMERICAN BEE JOURNAL. At his request it will be added to the next edition of the pamphlet, "Honey as Food and Medicine." Mr. Dadant adds: "I have used this recipe in similar circumstances." Here is the recipe:

A few years ago I got a serious cold; difficulty in breathing, pain about the sides, frequent shivers, etc. Dr. Stroehlin, one of our medical celebrities, prescribed tea of ground ivy as medicine, and milk as beverage, both sweetened with honey instead of sugar. After two days, I was completely cured.

This method, which is very simple, would not please those who spend hundreds of thousands of dollars to advertise their medicines. But, when sick, we take what we know, especially when it is cheap and salutary, with less reluctance than these pharmaceutical preparations, whose unknown manipulations are probably very little appetizing, and which too often act only on our pocket-books.—M. DESQUARTIERS.

Mr. Charles Dadant adds this paragraph to the foregoing:

FRIEND NEWMAN:—You may add that ground ivy, which is a labiate, or of the same family as the sage, is a very small plant, will grow everywhere, and is very good for bees. There is an illustration of it in our book (Langstroth Revised) on page 389. Fig. 138.

**Sub-Earth Ventilators.**—In regard to these ventilators in bee-cellars, P. H. Elwood says in *Gleanings*:

If properly put down they are beneficial. They keep a more uniform temperature. At one time, when the temperature outside was 17° below zero, the air as it entered the cellar was 37° above. Our sub-earth ventilator is made of glazed sewer-pipe, one foot in diameter for the first hundred feet; for the second hundred feet, 8 inches in diameter. At the end of the 12-inch pipe is an opening, to be used in moderate weather; but in cold weather the whole length of the pipe is used. The joints of the pipe should be securely cemented to keep out the ground air, which is usually loaded with moisture, and heavily charged with carbonic-acid gas. The last is very variable, however. Were I to put down another ventilator I should use 6 inch pipe, as being easier to make tight, and multiply them for capacity; also, if possible, I would have them extend in different directions, as the direction of the wind makes a difference in the draft of the pipe. I would also have one or more of them so laid as to act as drains in case of a freshet. Ours is so put down, and last spring it was used to nearly its full capacity.

**A Club Agent** down East has taken club subscriptions for papers, gathered in several hundreds of dollars, and then "lit out" with the money. Several subscribers for the AMERICAN BEE JOURNAL sent him their renewals, and lost all the money sent him. This should be a warning to all to send their money direct to this office, unless they personally know the club agent to be responsible. Do not give it to the Postmaster and ask him to send it, but send it yourselves, and save perplexity, annoyance and loss.

## GLEAMS OF NEWS.

**The Evil Effects of Booming.**

Mr. Alexander Black, of Sonya, Ont., wrote as follows on Jan. 2, 1889:

I send you an item clipped from the *Farm and Fireside* of Toronto, entitled "Do Bees Pay?" and I would like to know what you think of such a report. I consider such an increase and yield of honey utterly impossible, and I also think that such reports are not calculated to do bee-keepers any good, and may do others much harm, as it will make a great many rush into bee-keeping who know nothing about the business, and make a total failure in it.

Just think of a man making over \$120 from every colony he has in the spring, why should not everybody go into the business?

I am in the business, and have studied it for years, and believe that my bees have done as well as the most bees did last season; they increased from 7 colonies in the spring to 17 in the fall, and I got 150 pounds of honey. Of course the increase cost me lots of honey; but it was bees I worked for, and my 17 colonies were put into the cellar in first-class condition, and are wintering well without any signs of disease so far.

I am looking forward to better success next season. We have a fine, mild winter; have had no really cold weather yet. I am pleased with the BEE JOURNAL every week. Long may it flourish.

The item enclosed by Mr. Alexander Black reads as follows:

**DO BEES PAY?**—The following communication from Byron Iiams, of Worcester, Mo., will be of interest as showing a bee-keeper's actual expense account and profits:

I commenced the season of 1888 with 3 colonies of Italian bees, using Langstroth hives with movable frames. The bees had plenty of honey to stimulate active increase. Plenty of honey came in all through the season for fast breeding, and for building up strong colonies, ready for the grand flow of honey which commenced with Aug. 15, and practically closed Oct. 1. With the use of 200 empty combs, I increased my 3 colonies to 27. I worked 1 colony for queen-rearing, 3 colonies for comb honey, and 21 colonies for extracted honey. I sold 2 colonies. The results were:

2,400 lbs. extracted honey at 10c.....	\$240.00
100 lbs. comb honey at 15c.....	15.00
Two colonies sold.....	5.00
25 colonies left, worth.....	150.00

Total.....\$410.00

Deduct 3 colonies on hand to begin with, worth.....	\$ 18.00
21 hives at \$1.50.....	31.50

Total expense.....\$ 49.00

Net profit.....\$360.50

It is a very fabulous report, to say the least, not only viewed from the standpoint of increase, but also of sale. The 2 colonies sold brought only \$2.50 each, only one dollar more than the cost of the hives, but the 25 colonies left are valued at double that price. Extracted honey, at wholesale, bringing 10 cents per pound by the barrel, is not to be despised!

Mr. Iiams was taking the BEE JOURNAL some three years ago, but as he is owing for over a year's subscription, he will be well able to pay it now from his bonanza bees.

**Queens and Swarms.**—Mr. Albert Vought, Illawara, La., on Jan. 26, writes:

I feel fully repaid for this year's subscription, by Dr. Tinker's article on page 25. I had about decided to manage my bees something after that style, and at the same time accomplish my transferring, but I would ask Dr. Tinker, what becomes of the young queens? or does the old one always leave the hive before the young one hatches? Of course, in my case, where increase is wanted, it is all right. I understand how to manage them before they hatch.

The answer by Dr. G. L. Tinker, of New Philadelphia, O., is as follows:

When a colony of bees casts a swarm, and is managed as advised, it is not usual for the young queens to appear before the eighth day after, and second swarms cannot occur. Upon removing the brood and shaking off the bees, it will be seen if any of the queen-cells are sealed over, when we shall know that if it is placed over a wood-zinc honey-board in the super of another colony, the cells will hatch about the eighth day after.

If now the apiarist is not on hand to attend to the cells, the first queen to hatch will destroy the remaining cells very soon. From this time on until she is ready to mate, or about 4 or 5 days thereafter, she will be found nearly all the time on the honey-board, trying to get below. Upon raising the super, she will be seen at once, and undisturbed by the light, her efforts to get through the zinc are unabated. Hence, she may be readily removed, or the honey-board may be turned over and the young queen be allowed to kill the old one, which, so far in every case with me, she is certain to do. But if the young queen be left in the super until after the eleventh day, or until she is ready to mate, the bees will, for some cause, ball and kill her, and that is the end of all queens hatched in supers left to themselves above a wood zinc honey-board, except as stated in next to the last paragraph at the foot of the third column, on page 26.

It is therefore for the apiarist to determine what shall become of the young queens.

Although the young queens will destroy the old ones, as a rule, as stated, still I believe that it is better to remove the old one, if it is desired to supersede her, and then let the young queen have full away, as it seems probable that exceptions will be found to this rule, in which the young queen, after destroying the old one, may herself be balled and killed. At all events, contests between queens should be prevented as far as possible. Transferring by the new system is a decided success, as I transferred a number of colonies in this way last summer.

**Wasteful Ignorance.**—A correspondent in the Orange Judd *Farmer* of last week thus mentions a case of loss of honey and bees needlessly, through ignorance in the bee-keeper of the simple methods of bee-keeping. He says:

While traveling in central Illinois the past week, I met a bee-keeper living in a locality near a stream, and where heart's-ease was abundant in the fall. He told me that bees there never stored any honey except from clover, and that they wintered very badly—frequently the loss was 20 out of 50 colonies.

I asked him if he ever used an extractor, and he said he did not know what it was.

I then asked him if he ever gave the queen room to lay after the flow from clover was over. He replied that he never disturbed them until cold weather, when he removed the surplus honey.

Now, this man, by not being posted, was losing half or more of his crop, and three-fifths of his bees in winter. He should procure and use an extractor, or take out some

of the frames of sealed honey, and replace them with empty worker combs after the flow from clover was over, feeding, if necessary, so the queen may continue breeding, and giving her more room every few days, to insure that there would be lots of young bees in the hive the latter days of August, when the fields of heart's-ease or black-heart begin to bloom. He would thus secure a crop of fall honey, and lots of strong young bees to go through the winter.

**An Omission.**—Mr. R. McKnight, of Owen Sound, Ont., on Feb. 4, 1889, writes as follows:

In the report of the Ontario Bee-Keepers' Association meeting, as published in the AMERICAN BEE JOURNAL of the 2nd inst., I notice a sentence in Mr. Pettit's essay which was omitted at the meeting at which it was read, but has since been given to the world through the AMERICAN BEE JOURNAL and the *Honey Producer*. This "missing link" is a harmless piece of irony. It reads as follows: "Who in the present age is bold enough to assert that Mr. McKnight is not an original and profound thinker?"

Mr. McKnight himself disclaims any pretensions to either originality or profundity, and does not believe that the world credits him with being either original or profound. Moreover he did not then nor does he now care what Mr. Pettit may say or think of him; but Mr. McKnight does think it rather strange that Mr. Holtermann should cause to be published what he was evidently ashamed to read before the members of the association. Mr. Pettit's essay was read from a proof-sheet by Mr. Holtermann, and it included the sentence quoted above, but the pen was drawn through it, and it was "skipped" by Mr. Holtermann in the reading.

I was not a little amused when a gentleman present passed the proof-sheet over to me, and drew my attention to the erasure! What I complain of, is the want of candor manifested by Mr. Holtermann in his reports generally. I could give many instances of this, but one will suffice: At our annual meeting a year ago, one of the best essays was contributed by Mr. Allen Pringle; yet this correspondent and editor suppressed it in his report of that meeting as published in the *Honey Producer*. There must be something radically wrong in an editor who, because of personal pique, will deprive his readers of valuable information.

In the "copy" sent to us for publication, the sentence in Mr. Pettit's essay above referred to was not erased—probably by an oversight. Concerning the omission of Mr. Pringle's essay in the report of the convention of 1888, Mr. Holtermann wrote to us (before we received the above letter) that he was not aware of its absence until a few days ago; that it was purely an oversight which he much regretted.

**The Hanging Gardens of Babylon** were within the precincts of the palace called "The Admiration of Mankind." They consisted of gardens of trees and flowers on the topmost of a series of arches 75 feet high, and built in the form of a square, each side of which measured 400 Greek feet. The city of Babylon, with its famous gardens, was razed to its foundation 600 B. C. Two thousand five hundred and seventy-nine years later we find the celebrated gardens of James Vick, in Rochester, New York. For description, catalogue of seeds, advice how to obtain free a copy of Vick's Floral Guide, and also of the famous new rose, called "Vick's Caprice," address, James Vick, Seedsman, Rochester, N. Y.



## QUERIES & REPLIES.

### Amount of Stores Used by Bees in the Cellar.

Written for the American Bee Journal

**Query 613.**—1. If it is a fact, as is generally claimed, that bees consume but about one-half as much honey in a good cellar that they do out-of-doors, is that not so much wasted? 2. If not, are there any other considerations to balance this loss?—Bee-Keeper.

1. Certainly.—A. B. MASON.

Yes, to a certain extent.—H. D. CUTTING.

It is a fact, by weight; that is, in a cold climate.—A. J. COOK.

I have had no experience with cellar wintering of bees here in Louisiana.—P. L. VIALLO.

In our climate (Georgia) we have no use of bee-cellars, but winter our bees out-of-doors.—J. P. H. BROWN.

1. No, it is so much saved. 2. None that I know of.—R. L. TAYLOR.

1. No, it is not wasted. 2. Yes, brood-rearing early out-of-doors, especially in winters like the present.—DADANT & SON.

1. No. It is that much saved. 2. The considerations are a balance in favor of the cellar.—J. M. HAMBAUGH.

In an open winter like the present one up to date, bees consume scarcely more stores out-of-doors than in-doors, and winter better, as a rule.—JAMES HEDDON.

As far as I know, cellar-wintering of bees in this part of the country (Indiana) is not much practiced. Among my acquaintances, it has not been a success.—M. MAHIN.

1. Well, yes. 2. The first cost of constructing or preparing the cellar, and then the labor of placing the bees in the cellar and taking them out.—MRS. L. HARRISON.

1. No. 2. Sometimes a cellar is not convenient; and, with a great majority, bees can be properly packed for winter, and as safely upon the summer stands, with less labor than they can be carried to the cellar. Your query calls for an article, as there are many points which cannot be touched upon in this limited space.—W. M. BARNUM.

"This is the same old question," and the best we can say is, that "it all depends." As the pursuit has reached that point where bees must be handled by hivefuls and by the can full, there seems no way about it, but for keepers who live in cold latitudes, to store them in a cellar. We look for compensation in the harvest, not in how much they eat during the winter.—J. M. SHUCK.

Yes, I consider it a great waste of honey to winter bees out-of-doors. As a rule, bees wintered in a cellar do better the following season than those wintered out-of-doors. I know that many good bee-keepers will differ from me, but this is the conclusion that I have come to after wintering bees in both ways for more than 20 years.—C. H. DIBBERN.

I have a heap of ignorance on this subject. If my bees would make a "live" of it out-of-doors, I think that I would be willing to lose some extra honey. For one thing, they have better ventilation, and I am just old-fogy enough to believe that is very important.—C. C. MILLER.

The extra amount of honey consumed is used as fuel to keep the bees warm. Is the fuel you burn in your stove in keeping the house warm, wasted? If so, had you not better move down cellar with your family, so as to save it?—G. M. DOOLITTLE.

1. As a rule, the more quiet bees are kept, the less honey they will consume. In some years this can be done in cellars, as bees are ordinarily kept; in other years it can be best done out-of-doors. Claims are made for cellar wintering that apply to very cold localities, that would not hold good in warm situations.—J. E. POND.

1. I do not believe that it is a fact. The difference is not so great as one-half. Whatever the difference is, is certainly wasted, if the results are the same. 2. Having never tried but one method, I cannot speak with the confidence of him who has tried both. It is claimed by some that there is less spring dwindling, and better final results by wintering bees on the summer stands. Undoubtedly *climate* has a good deal to do with it. The bee-keeper ought to study the question from the stand-point of locality.—EUGENE SECOR.

1. The more honey my bees have in the brood-nest, the better they winter, and the better work they are able to do when the early honey harvest appears. Perhaps more bees are ruined on account of light stores in winter, than on any other account; therefore, the question of *waste* should not be put in the way of best results. 2. Many apiarists believe that bees are more hardy and long-lived when wintered out-of-doors.—G. W. DEMAREE.

1. Bees consume more honey when wintered on the summer stands, but the consumption would hardly reach to double the quantity, especially in winters like the present one, when cold weather must be of very short duration, if we have any worth mentioning. Honey used to keep the bees in the hive warm, should not be deemed

wasted; wood or coal used to keep humanity warm in houses is never thought to be wasted—each serves the purpose intended. 2. Against the account for honey used "out-of-doors," place the cost of the cellar or beehouse, the trouble of carting in and out, etc. These would probably balance the account, and leave the choice of methods upon other considerations than value of the honey consumed.—THE EDITOR.

## CORRESPONDENCE.

### IN-BREEDING.

#### New Blood in the Apiary an Essential Matter.

Written for the American Bee Journal  
BY EUGENE SECOR.

On page 60, in answer to the question, "How long will bees prosper without new stock from a distance?" I notice this reply: "For an unlimited time." Now I doubt the correctness of that doctrine; and, as I am not a queen-breeder, I ought to be allowed an opinion without prejudice.

With such "free commoners" as bees, it is quite a difficult matter to prove to what extent in-breeding is practiced, or with what effect; but if we reason by analogy—from the known to the unknown—it is very conclusive to my mind that nature abhors incestuous alliances.

We know the effect on the human race, of the marriage of near relatives. Any one who has experimented in that direction with our domestic animals, knows its baleful effects. I am aware of the claim in certain quarters, that some of the most valuable characteristics of our domestic animals have been developed by in-breeding, but even admitting that to be true in exceptional cases when done intelligently, every breeder knows it is safe to avoid it as a general rule.

The experiments of Darwin in self and cross fertilization of plants, carried on for many years with a patience and persistence that only a lover of the truth could have shown, proved that the same law governed, too, in the vegetable kingdom. He reasoned that the chief end of bees and other pollen-gathering insects was to fertilize and cross-fertilize the flowers, thereby causing not only greater beauty and perfection of flowers and fruit, but vigor and longevity as well.

Corn grown on one farm for a series of years without the introduction of new seeds, deteriorates. The same is

true of other farm crops. Now if such beneficial results accrue to both, the animate and inanimate creations (where experiments have been carried on), who shall say that these highly organized insects, bees, that perform such an important part in developing plant-life by cross-fertilization, are not amenable to the same general law of nature, that seems to govern the reproduction of plant-life itself? Or if both the higher and lower forms of life are benefited by crossing, why not the intermediate?

It may be that this matter has been proved, substantiating the theory expressed; but if it has, I have never heard of it. I can conceive how difficult it would be to fully and satisfactorily verify either theory, in the present state of the art. If fertilization in confinement ever comes to be an established fact, we could proceed upon an intelligent basis to demonstrate the facts. Or, if we could take a single colony and isolate it 15 or 20 miles from all other bees, and limit their increase to 2 or 3 colonies, so that near relatives would be compelled to mate, a few years might throw light on the subject. But, few such places exist, and if they did, bees multiply with such rapidity that only a short time would elapse before the relation would be so distant that the probable harm would be reduced to a minimum. Perhaps that is what was meant by the answer given to the question. If so, our notions may not be so antagonistic as I at first thought.

But I believe in new blood. It seems to me that the history of modern bee-culture proves the desirability of infusing vigor into the apiary, by the introduction of distant and unrelated queens. I would not trust altogether to nature's methods, and compel the queen to fly to a neighboring apiary.

Forest City, Iowa.

## IOWA.

### Report of the Nashua Bee-Keepers' Convention.

Written for the American Bee Journal

BY H. L. ROUSE.

The third annual meeting of the Nashua Bee-Keepers' Association met in the Council Rooms at Nashua, Iowa, on Jan. 26, 1889, at 1 p.m., with President Tracy in the chair. The minutes of the last meeting were read and approved.

#### Wintering Bees in Cellars.

In discussing cellar-wintering of bees, Mr. Bird preferred upward ventilation, with the surrounding temperature at 45° to 47°. Others preferred a

lower temperature, with scarcely any upward ventilation. A cellar with a living-room above was considered much better for the successful wintering of bees, than one having no fire over the bee-cellar.

"In what way can we best improve our bees?" Answer: It was decided that we should buy a few choice queens, and always exercise much care in breeding from our best bees.

"Would vegetables be detrimental to bees in the cellar?" It was thought not.

Next was the election of officers, which resulted as follows: President, Thos. Tracy; Vice-President, Geo. Stocks; and Secretary, H. L. Rouse.

"Is it desirable to have bees breed in the cellar?" Mr. Tracy would rather that his bees would not breed until after being put out in the spring. Others thought that a few frames of capped brood were a great advantage.

Mr. Stocks advocated facing hives to the north, as the bees would not be enticed out on chilly days. President Tracy puts his bees out of the cellar in the night. If the weather is favorable, he cleans his hives out on the second day after putting them out; and Mr. Potter cleans his hives out on the day he puts them out. Beginners should be very careful about overhauling bees in early spring.

H. L. Rouse then read the following essay on,

#### Bee-Keeping Alone, or with Other Pursuits.

Shall we make bee-keeping a specialty, or unite it with some other business? I believe that there are a few apiarists at the present day who make bee-keeping their sole business, but their number is small compared with the host that make it a side-issue. Let us consider the feasibility of the "specialty man" first.

Suppose he has invested all his capital in 100 colonies of bees, and fixtures to work them for either comb or extracted honey. If the season is good, and he has no opposition, he will secure a good crop of honey, and thereby make some money. If this continues long, his near neighbors will soon "catch on," and they will keep bees all around him, in which case they will spoil the specialty man's business, and gain nothing thereby themselves.

"But," says one man, "why not enact laws giving the first bee-keeper a certain amount of territory, or let priority of location rule?" I have grave doubts about this being a wise policy to adopt; besides, if the specialists were guarded by such a law, there is another and greater uncertainty to contend with, and that is, the failure

of the honey crop from which nobody is secure. All bee-keepers will bear me out in this by their experience of 1887 and 1888.

On the other hand, I agree with Mr. Root, that "it is not best to put all our eggs into one basket." I will not say what other business is best to unite with bee-keeping, as so much depends upon how a man is situated, and also somewhat as to his tastes. To the bee-keeper living in the suburbs of cities, I would say, raise poultry, or he might find the raising of small fruit and garden-truck more profitable. To the bee-keeper on the farm, I have not much to say, as there are various ways open to him, in which he can turn an honest dollar.

In the meantime, do not neglect to give proper care to what bees you have. It would be "penny wise and pound foolish" to allow them to starve, when a few pounds of sugar syrup or honey would bring them through nicely.

I think that bee-keeping has reached "bed-rock." In fact I feel convinced that now is the best time to give bee-keeping our most careful attention. The past two or three failures in the honey crop have driven the slovenly and careless bee-keepers from our ranks. It is the same in our pursuit as it is in other lines of business—the man who is the most careful, prudent and thorough, will succeed the best, while the man who does things by halves will fail, no matter what occupation he follows. If a thing is worth doing at all, it is worth doing well.

The convention then adjourned.

H. L. ROUSE, Sec.

## TOADS AND BEES.

### Will Toads Destroy the Bees?—Experiments.

Written for the American Bee Journal

BY E. STRONG.

That toads will eat bees has often been asserted and never disputed; but the published proof has been wonderfully slim. The same can be said of the indictment against the king-bird. When a boy, I was offered five cents for each bird that I shot, the bee-keeper claiming that they eat the bees. This, father could not allow without proof. We thought that we found in the bird's stomach some pieces of the bees, and in some publication an article stated that the king-bird possessed a hard cushion on the top of the bill, placed there purposely to receive the sting of a bee and wasp. So, sentence was passed, to the great delight of the executioner but I never found any



sting in that cushion. Then what becomes of the sting? One powerful thrust of poison in the stomach or mouth of so small a bird would often produce death.

So, in after years, I had learned to doubt some of the things "even read in books," and, as a bee-keeper, "watched out" for Mr. Toad. But he had a bright eye to business, and was never off his guard. He looked pretty full, though, and suspicion was strong against him. Sometimes he was placed on the alighting-board and watched. In this position, he would pick up the flies, and never touch a bee. Yes, he knew better than to get stung. But the bee-papers harped away about toads, and I could not say they were wrong.

A medium-sized toad was placed in a nail-keg and put in the sun without food or water all day. At the cool twilight, he was tenderly placed on trial on the alighting-board. His game eye glittered with tears of joy; but his early education made him proof against temptation, and he was remanded to prison another night and day.

While standing on the alighting-board, a bee sent its sting into the tender membranes of the toad's foot, but the foot never stirred, and did not seem to feel pain, nor did it swell in the days to come.

Each night Mr. Toad was brought out for trial, for four days, with the same results. Hunger and the burning sun had reduced his size and health, but reptile and batrakian that he was, unlike a man, he showed his superiority to the low passions of resentment and hunger, and I let him go. Prof. Cook will easily see that in this respect, development has not improved the human race. Well, the decision of the court was, that toads had some good qualities, and, among the rest, they knew better than to swallow a *live* bee.

A year went by, and all the papers still howled toad! One wet day a toad crawled under a hive when it saw the bee-man approach. It looked guilty, and was promptly placed on the alighting-board. Four minutes went by—but without touching a bee. In the fifth minute it swallowed seven. The officer immediately nabbed that toad, and the ordinary methods of vivisection were applied, with the following result: Five stingers were found firmly imbedded in the coatings of the stomach, which was promptly mailed to our distinguished author on anything pertaining to the bee—Prof. Cook. But I never heard from him, and if the clerks from the Post-office threw it out, they did their duty.

Kalamazoo, Mich.

## BASSWOOD.

### The Challenge Accepted, and the Proof Furnished.

Written for the American Bee Journal

BY DR. A. B. MASON.

In the AMERICAN BEE JOURNAL for 1888, Mr. R. McKnight, in his inimitably eloquent and facetious way, pays me several compliments, and I enjoyed the article right well, as I do everything he writes. I enjoyed it not so much for what he said, as for the kindly way in which he said it, and were it not for the "challenge" he gave on page 791 of the AMERICAN BEE JOURNAL for 1887, I should be more than pleased to let the matter rest with his pleasant words and kind wishes. But were I to do so, it would be a tacit acknowledgement on my part, that I had made an assertion, to back which I had no proof. To be sure, it is some time since Mr. McKnight made his "challenge," but it is not too late to prove that I was right, and did not "misstate the facts."

On page 791 of the AMERICAN BEE JOURNAL for 1887, he says:

"Dr. Mason misstates the facts when he says that 'Canadians, in a Wiley way,' or any other way, either here or elsewhere, have sought to destroy confidence in the good qualities of American basswood honey, and claim superiority for their own. I challenge him to name a solitary Canadian (apart from Mr. Pettit) who has made such a statement. (Italics are mine.) 'One swallow does not make a summer,' nor one man a nation, and it is not generous on the Doctor's part to manifest such antipathy against his 'cousins across the border,' and their relatives across the pond,' because one of our people holds and expresses opinions peculiar to himself, and in which his fellow countrymen do not sympathize."

To be sure, "one swallow does not make a summer, nor one man a nation," but if *two* did, the "summer" and the "nation" might be made, but there are four with which to make the "summer" and the "nation."

To be sure, three of "the swallows," or men, besides Mr. McKnight, Messrs. Pettit, Jones and Corneil, have not denied making the claim of superiority of Canadian over our linden honey, and Mr. Pettit has the manliness to "stick to his convictions." All honor to the man who does it. I doubt not that Messrs. Jones and Corneil would have done the same, if they had said anything, but what must we think of a man who makes such a claim, and then denies it? Well, I guess we shall

have to think his memory was a little treacherous.

I was quite sure that I did not "misstate the facts," and to show that I did not, allow me to quote from a circular now lying before me, tens of thousands of which were distributed in Great Britain. The heading is as follows:

"The Bee-King and His Bees. From the *Pall Mall Budget*. A Chat about Canadian Bees." After speaking of "the exhibit of the Ontario Bee-Keepers' Association" at the Colonial Exhibition, it says:

"It has come over in charge of a deputation from the association, who are at present on a visit to this country with a view to open the English market to the best honey in the world, as they constantly described (italics are mine) the article which they have on view."

I believe the "deputation" consisted of Messrs. Pettit, Jones, Corneil and McKnight—three besides Mr. Pettit, and they among the most noted Canadian bee-keepers who "constantly describe" the Canadian honey as "the best honey in the world." To be sure, "one man don't make a nation," as Mr. McKnight says, but how is it about four doing it?

How does the above look by the side of Mr. McKnight's "challenge?" Now who is it that "misstates the facts?"

Near the close of the circular before referred to, the "deputation" says:

"We publish a weekly bee-journal, which keeps all our members well informed of the latest appliances for securing the maximum of yield, and the minimum of risk; and we think that all who visit our exhibit at the Colonies, will admit that for colour, flavour, and specific gravity we throw all other honeys in the shade." (Italics are mine.) Don't "claim superiority for their own!" Haven't "sought to destroy confidence in the good qualities of American basswood honey, and claim superiority for their own!" Well, what does it mean then, I wonder?

In another place the "Budget," as quoted by the circular, says: "It was with peculiar interest that we bade Mr. Jones welcome as he entered our office with two other representatives (Messrs. Pettit and McKnight) of the Bee-Keepers' Association," etc.; and further says: "We claim to be located in the very heart of the honey-belt of the United States." Since when have the Canadians claimed "to be located" in the United States? Will some Canadian please make me a present of a map of Canada, showing whereabouts Ontario is located in the United States? I have some pretty good maps of the United States, but, I do not find "Ontario" on any of them, and it seems a little strange that while claiming superiority for their honey over

that produced in the United States, that they should at the same time "claim to be located in the United States!"

In another place the "Budget" man asks the deputation, "What special advantages have you in Ontario beyond the United States?" "Chiefly in the linden trees. In the honey-belt of the United States of America, there is also less clover than we have, and the lindens are scarcer. . . . Our forests are full of linden trees, and the yield of honey is enormous. Even if you shake the tree, the honey drops upon you from above."

Is there no effort in this "in a wily way, or any other way. . . . to destroy confidence in the good qualities of American basswood honey?" I wonder if Mr. McKnight wants to throw all the responsibility of claiming superiority for Canadian linden honey on Mr. Pettit.

I was not aware till I got "The Bee-King" circular, that Ontario was larger than the United States, but it must be so, I suppose, for the deputation say, that "in the honey-belt of the United States of America, there is also less clover than we have, and the lindens are scarcer." Whew!! I didn't know that before. I guess that "fisheries commission" had better be empowered to change our northern boundary so that it will run across the continent on the 49th parallel, and so Ontario will be in the United States, and then we can get more clover and linden honey, and have some linden trees to shake honey from! What a paradise for lovers of honey; shake it from the trees; *Apis Dorsata* and *Apis Americana* are not needed.

Will not some Yankee invent a honey-catcher to be used under Ontario linden trees? If any one *does* invent such a machine, I think I shall be entitled to a half interest in it for the suggestion.

"Less clover honey than we have." Is t-h-a-t s-o? "And the lindens are scarcer." How long have they been scarcer? No effort here "to destroy confidence. . . . and claim superiority?"

In another place the "deputation," or the circular, says that Ontario produces a yearly "crop of honey valued at £100,000." According to the most reliable authorities, that is about one-thirtieth as much as is produced yearly in the United States. If such is the case, and Ontario has more lindens and clover than we have in the United States, the honey ought to drop from our linden and clover **without shaking.**

Less linden and clover than in Ontario, where the honey "drops upon you from above" when "you shake the tree," and still we get thirty times

as much honey. Oh my! "it makes me tired" to think of it.

I believe that it would be a good idea to publish the whole circular in the *AMERICAN BEE JOURNAL*, for aside from a few mistakes about our honey and country, it is good reading, and shows how earnestly the deputation worked for the interest of the Ontario bee-keepers and the Bee-King. It seems a little strange that it was not published in the *Canadian Bee Journal*, with a statement as to about how many copies were distributed. I am sure that it is better and more interesting reading to me than much that was published about the Ontario bee-keepers' exhibit at the "Colonial."

Auburndale, O.

[A portion of the article from the *Pall Mall Budget* was published in the *AMERICAN BEE JOURNAL* for Nov. 3, 1886, and is illustrated on page 694. We hope this will satisfy all, and that this controversy will end here.—ED.]

## QUEEN-REARING.

### Method of Rearing Queens for an Apiary.

Written for the *American Bee Journal*  
BY G. W. M'GUIRE.

In the advanced age of this wide, developing pursuit, but few ideas can be advanced that have not already been thought of; but the days of criticism are not over, therefore many are fearful to make public their theories, for fear of the ordeals of the thinking public. Perhaps nothing in the whole bee-industry has received more careful thought than queen-rearing.

First, we want an easy, practicable method, wherewith we can rear handsome, prolific, long-lived queens. In this latitude, about March 1, when bees begin to gather pollen, select the finest colony, that is, the one containing the finest queen; feed this colony about a pint daily, with a closed entrance-feeder. You should, by May 1, have them "boiling over" with bees, with thousands hatching daily, and drones a plenty.

Now put on an upper story with ten frames, filled with brood foundation, with a queen-excluding honey-board between. But before doing this, take out one outside frame, separate the others, and put a new frame of foundation in the centre. The frame taken out can be put in the upper story.

Let the upper story remain about five days. If the weather is favorable, the bees will be largely in the upper story, and have the foundation nicely

drawn out. Now remove the lower story to a new stand, and place the upper one on the old stand.

Go to the old hive, take out the frame of foundation that was put in five days previous, and cut it full of oblong slits; it will have larvæ just hatched; exchange this for the old frame, and put it in the centre of the hive. At the end of ten days examine them, and if the bees belong to the yellow race, you may think of going into the "peanut business."

You can now form nuclei from the other colonies, and in 12 hours insert one of the queen-cells, until the number of cells are exhausted. The result will be large, yellow, long-lived queens.

In a week or so the queens will be mated, and laying. By this time the other colonies will begin to swarm; when one swarms, hive the swarm on a new stand, and go to one of the nuclei colonies that has a laying queen, remove her, and cage her in the old hive from which the swarm has just issued. In 24 hours she will be released and laying. You can now place a new queen-cell in the nucleus. By this method the old colonies are not queenless more than 24 hours at any time. If left to "nature's way," they would be at least 15 days without a laying queen; consequently a loss of 30,000 or 40,000 bees, and hence it is wasteful to allow bees their own habits, as far as bees or increase is concerned.

Dark Ridge, N. C.

## INDIANA.

### Report of the Indiana State Bee-Keepers' Convention.

Written for the *Indiana Farmer*  
BY G. K. HUBBARD.

The ninth annual meeting of the Indiana State Bee-Keepers' Association convened at Indianapolis on Wednesday, Jan. 16, 1889, at 1 p.m., and was called to order by President E. H. Collins. Secretary George C. Thompson being absent, Mr. G. H. Hornbuckle filled the office.

Mr. J. M. Hicks was called to the chair, and Mr. E. H. Collins delivered the following:

#### President's Annual Address.

While the off years in apiculture are hurrying along with their weary days of labor and disappointment, we have three measurable compensations for our time and effort. The honey market is being cleared, and the number of producers lessened, while the bees remain healthy, and the colonies strong. At the same time our indi-



vidual and collective experience is broadening, as is also our knowledge of apiculture, and improving our methods of manipulation.

Why not prepare a good display at the State and county fairs, and make it a nucleus about which congenial minds may gather? Why not meet more often with our neighbors in their local societies, and even visit them in their homes?

All labor is elevating or degrading in its effects in proportion as it requires thought and skill to guide it. You may force a horse to draw you, or you may drive a pig from place to place; but he can only lead a bee and compel it to build its marvelous combs according to man's convenience, and fill them with the largest stores of the richest sweet, who has studied the law of its instinct, and has mastered the mysteries of the hive.

In bee-keeping, as in everything, "ignorance is the great sin," and research and tact have a most happy reward, while there is no greater pleasure than the study of entomology and the peculiar and fascinating habits of bees.

There is a very active evolution taking place in selecting the more desirable hive and fixtures. Amidst the chaos of inversion, horizontal section, fixed and loose frames and sections, tin, wood and wire-cloth separators, the result so far points to the open-sided one-piece one-pound section— $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$  inches; also to wood for separators, and some form of section-case rather than wide frames. While amid the dust and smoke of hot discussion, we still see the Langstroth hive, or a modification of it, still holding sway.

#### Items of Interest.

If a hive-cover leaks, or if a hive be often removed or opened to admit light, the bees smoked or the combs disarranged, the queen removed or introduced, or the purpose of the bees repeatedly thwarted, especially during a honey-flow, they may become discouraged and neglect work, or even swarm out. Dr. Tinker, of Ohio, at the North American Bee-Association, gave a method of preventing increase without crossing the purpose or will of the colony.

Some careful experiments are being conducted by Prof. Cook and others on the practicability of planting for honey; on cellar wintering; ventilation; winter stores; queen-mating, etc. Mr. Demaree, of Kentucky, has been experimenting on warming the cellar every few weeks, to a temperature which permits the bees to break cluster for a few hours.

The Bee-Keepers' Union has been doing efficient work in defending the

interests of apiculture, and should receive the support of bee-keepers.

At the North American Bee-Keepers' Society, last fall, new instruments of organization were adopted making it a representative body. This society might consider the propriety of appointing delegates.

There is one more subject which should claim the attention of this society, that is the apiarian exhibit at the State fair. Some years a few enterprising individuals have made creditable exhibits. In some States a committee has been appointed by State societies to co-operate with the State Board of Agriculture, and the result has sometimes been that a commodious house was built for the exhibit. We may expect but an inferior display unless some systematic effort is made to prepare for it.

After the President's address, Miss Eva Scholl presented an essay on "The best method of obtaining straight comb."

Mr. G. K. Hubbard, of La Grange, then read an interesting essay on "Theoretical Apiarists," which will be published hereafter.

#### Second Swarms.

Mr. W. Mason was assigned this subject, and discussed it as follows:

"This is a mooted question, and I believe that races of bees have a great deal to do with the subject of increase. In preparing for the spring work, one of the main points is, to get ready for the honey harvest. In our spring work, increase is one of the essentials with a successful apiarist as a honey-producer, and to be that, I do not favor a hive with too large a brood-chamber, not larger than 2,000 or 2,400 cubic inches. In this I crowd the combs so as to take an extra comb over the usual manner of spacing, and when I have the brood-chamber full of bees and brood, I at once proceed to put on upper stories, either for comb or extracted honey, as one of the methods to prevent too overcrowded increase; keeping the swarming fever down, either by extracting or adding primed sections, by raising the case of sections directly over the brood-chamber, putting on empty ones in place, and under the first case next to the brood-chamber.

"In case I have a prime swarm, I hive them in another hive. As soon as the queen has her work started, I remove the honey cases from the parent hive to this hive. After the parent colony has reared its queen-cells, I remove all but one, to prevent after-swarms, putting on section-cases as soon as they show signs of being crowded in the brood-chambers. In

this manner I am bothered with swarms but little, especially after-swarms, thereby keeping down the swarming fever. As a rule, I never prevent increase of bees, but try to avert the swarming impulse; for if we get a honey crop we must have our hives full of bees; and yet with all of our skill and management, they will swarm, and swarm."

A number of queries were discussed at great length.

The question which agitated the minds of the members the most, was the following memorial, which was ordered to be sent to the State Board of Agriculture:

*Whereas*, The exhibition of the apiary department at the State fairs has been a hap-hazard affair, we ask as a society that the Board recognize Mr. J. M. Hicks as the superintendent of the apiary exhibit at the fair, and that his recommendation of a person or persons for judge or judges of said exhibit, be appointed."

Furthermore they desire the amount of premiums raised from \$99 to \$300.

The following new officers were elected: President, E. H. Collins; Vice-Presidents, W. C. Hall, T. S. Bull, G. B. Wilson, J. M. Hicks, Mrs. F. M. Cooper, W. Mason, W. Jordan, L. Snyder, J. T. Coffman; Secretary, G. C. Thompson; and Treasurer, Mrs. C. Robbins.

The bee-keepers desire recognition in the Board of Agriculture, and have instructed J. M. Hicks to represent them at the next meeting of the Board, which occurs on Feb. 19.

The convention then adjourned.

## BEE-WISDOM.

### Can Bees Reason, and Talk to Each Other?

Written for the American Bee Journal

BY PHILIP WECK.

Those who have watched the sagacity of bees, know that if only one bee discovers where honey is secreted, it will fill itself and return to its hive, and very soon it will bring an army of bees with it to carry home the discovered treasure, as much as fifty pounds a day; and if you assail one in a lonely place, the bee will go home, report the insult, and bring a company with their sharp-pointed weapons, to dart and avenge the insult of the one who was assailed. They are continually on their guard to avenge their enemies, man or beast, who are thousands of times larger than themselves. They have sentinels guarding their hives, which will appear to the reader, from

what I saw; their faculty of reason is very large, which can plainly be seen by the following incident:

One day while examining my hives, I saw a spider lodged in the corner of a hive, spinning its net. One bee flew in front of the hive to fight the spider, but the spider finally succeeded in spinning its web and trapping the bee in it; and while the bee was struggling for liberty, three other bees came to its assistance, and flew all at one time unitedly at the web, at least 20 times, to liberate the entangled bee.

I am sorry that I did not wait for the result, as I liberated the bee from the web myself. I have no doubt but what they would have accomplished their object, broken the web, and freed their imprisoned companion.

Bees are the most wonderful insects that God ever made. Not one lives to be more than one year old, except the queen; yet just look at their industry in laying up treasures for the rising generations, as well as for themselves, coming home doubly loaded when the flowers bloom, from sunrise to sunset, and often by moonlight; what ingenuity is exhibited in sipping honey from flowers, and in manufacturing wax to build their store-house to store their rich treasures; in making cells, which they so wonderfully construct; while in others, the queen will deposit her eggs, and still others are used to store pollen to feed the rising generation; in building queen and drone cells at the proper time; in hindering queens from killing each other, when it is not best; in getting rid of drones when not wanted; and what a grand sight it is to see them swarm!

How wonderfully and skillfully God has made the little bees to gather such luxuries for man.

Cheviot, N. Y.

## PASSAGE-WAYS.

### Winter Passage-Ways Through the Combs are Unnecessary.

Written for the American Bee Journal  
BY G. M. DOOLITTLE.

Not long ago a neighbor bee-keeper called, asking if he might see how I made passage-ways for the bees through the combs, so that the bees might not be caught by each cold snap during the winter, on the outside of the combs, away from the cluster, as the bees were contracted in the cluster so as to keep up the warmth necessary for the colony to pass through each cold spell.

I told him that I never, of late years, made such passage-ways, for I did not think them at all necessary. As it may

seem to some that I was just a little "off the track" in so replying, I will give a few of the reasons why I think as I do, as well as some of my observations along this line.

As fall approaches, if we examine a colony of bees, we will find that the activity manifested during spring and summer in the interior of the hive, becomes less and less, so that by the middle of October, in this latitude, all brood-rearing has ceased, and the bees have become partially dormant; still, so far, they have not packed themselves away in a snug cluster, or compact shape for winter.

Every opportunity given by a warm day is improved to void the feces, so that the bees may be prepared for a long cold spell, when such occurs. As the weather grows colder, and the bees contract their cluster, many packing themselves away in the cells until the smallest possible space is occupied by them, and thus the requisite warmth is secured to keep them alive, when the mercury sinks below zero.

All are well aware that in this contraction of the bees (at certain times), many of them are left singly or in little clusters of from five to ten, which do not recede with the main cluster, and thus are chilled where they are, and if the weather becomes cold enough, they are frozen, thus losing to the cluster that number of bees. Some claim that this loss is going on all winter after each warm spell occurred, where large frames are used, and say a reason why bees seemingly wintered so much better in box-hives years ago, was because with box-hives, cross-sticks were used in the center of the hives, which caused holes or passage-ways through the combs in the centre of each, while with a large movable-frame no cross-sticks could be used, as was the case with box-hives, and hence no holes were left as there were in those days; thus compelling the bees to pass over and around the combs of cold honey to keep pace with the receding cluster, instead of passing through the centre of the combs to the next range, which was more nearly filled with bees.

In thus passing around after each warm spell, many bees become stiffened and are caught by the cold, which might have been saved if holes were provided in the centre of the combs for them to pass through. This evidently was the argument used years ago, when the Langstroth frame and others were provided with a shaving bent to form a circle an inch or so in diameter, which was suspended from the top-bar by means of a little strip of tin, supposing that this would effectually secure a passage-way for the bees. However, but a short time elapsed before it became apparent that during a

good yield of honey this shaving would be filled with comb and honey, thus making the combs as they were before, as far as passage-ways were concerned, while the combs were much damaged by the plan, to what they would have been had they been built whole.

However, I used to be one who considered these holes necessary, and after failing with the shaving, I next practiced cutting holes through the combs, each fall, which would be filled up the following summer, so that when winter approached, the process had to be repeated.

This taking out all of the combs each fall was quite a job, and when some one suggested that a hole might be bored through one side of the hive, and a square stick made sharp at the end, slowly wormed through the combs to the opposite side, so as to make a hole through each without danger of killing any bees, I was not long in adopting that process.

If holes were to be made through the combs, the above is the best plan I know of; but it soon became apparent to me that the reason assigned as the cause of the death of the bees was not the real trouble, for while making holes one fall, I found little clusters of chilled bees between the combs just outside of the cluster, and also in the sections of a hive, which happened to be left on after the rest had been taken off; these same chilled bees being on the combs right above the entrance to the sections, and only a little way off, and in a direct line with the cluster below.

Later on I found the bees would stay and die within  $\frac{1}{2}$  of an inch of the holes which I had made, when it would appear that they could have passed through these passages just as well as not. This opened my eyes, and upon carefully noting the facts which came under my observation, I discovered that when the weather was cool, cloudy and rainy for several weeks before it was severely cold, so that the bees had no chance to fly, this loss was apparently much greater than when a clear, warm day occurred so that the bees had a good flight immediately before a severe cold spell.

By the number of bees that were found on boards and such places, dull and quite stupid after such a fine day, I concluded that these were the very same bees that would have died by not following the cluster, had not a warm day occurred for them to leave the hive to die; hence I say that the loss was apparently greater when no such day occurred, for the bees that were found out around on the boards and grass after a warm day, represented the same bees which gave me so much uneasiness upon finding them dead in



little clusters away from the main cluster, when they were compelled by cold weather to die in the hive; so really there was no difference.

After bees once get thoroughly clustered, I do not see this loss occurring after each warm spell, as some claim that it does, as spoken of above; nor but little after a warm fall like the past has been, when the bees have an opportunity to fly every little while.

After being fully settled for winter, and this loss of bees that are without sufficient vitality to stand the first cold spells, has passed away, a colony will lose but few bees during the rest of the winter, if there is no other disturbing causes, except warm and cold spells alternating, as is attested to by our finding scarcely a handful of dead bees on the bottom-board after a long period of such weather.

From the above I decide that holes through the combs are unnecessary, and that no provision need be made other than exists in all well-regulated movable-frame hives.

Borodino, N. Y.

## FACING HIVES.

### How to Place the Hives when Taken from Cellars.

Written for the American Bee Journal  
BY FRANK COVERDALE.

In which direction should bee-hives front? is a question of great importance. It is also one very little discussed by our ablest apicultural writers, though we have been advised to set out wind-breaks, or build a high fence, and behind all this have the location facing in a southerly direction, thus making a warm, cosy place for the bees in early spring, and a very hot place in the summer. This, in my thinking, is very objectionable, as here is liable to occur great mortality in early spring, and an abundance of swarming right in the midst of the white clover harvest, and before they are really strong enough to swarm; where, if the hives had been fronting northerly, with scattering shade trees (not high trees), so as to shade the hives a part of the time, the trouble might not have occurred.

I would not advise having shade trees very thick. It is from personal experience that I write. I have been experimenting in this direction for about ten years, and I think that I have come to a conclusion that is satisfactory to me. I cannot control my bees in a hot or sultry, close place, for they will hang out on the fronts of the hives, and at a loss of honey, or at my expense. The better the honey-flow,

the warmer is the inside of the hive, so it would be well for us, even in this latitude, not to choose too hot a place for the hives. If I should have any slope at all, it would be in any direction except south.

On the other hand, early spring is very trying, and at this time of the year we should do all we can to save the old bees, for if we accomplish this, other things being favorable, we will have plenty of brood, and plenty of bees to gather the clover honey. For hours in the spring of 1888 I watched, with much interest, the little bees fly from the cosy and well-protected apiary, on which the direct rays of the sun rested, causing the bees to take wing in great numbers. Over the willows they flew, with the temperature at 45°, though there were clouds at times, and chilly northern breezes. If my bees had been on the north side of the willows, they would not have been out, taking the chances.

I had one row of hives fronting north, and where the cool breezes could strike the entrance; these bees did not dwindle to any extent, while those in the sun, and facing south, though protected from the wind, dwindled down on the average of one-third of the bees. Thus it may be seen that if the white clover had yielded a surplus, I would have been the loser of hundreds of pounds of honey. In short, I think quite positively, that it is not best to carry bees from any repository, and front their hives to the south, in a sunny and close yard.

Welton, Iowa.

## ILLINOIS.

### Report of the Northern Illinois Bee-Keepers' Convention.

Written for the American Bee Journal  
BY D. A. FULLER.

The annual meeting of the Northwestern Illinois and Southwestern Wisconsin Bee-Keepers' Association was called to order in the county Court Room at Rockford, Ills., on Jan. 15, 1889, by President L. Highbarger. The reports of the members showed 20 beekeepers present, and their crop of honey for last season was 9,280 pounds of comb honey, and 10,080 pounds of extracted honey. All of the members thought that their bees were wintering well, with plenty of stores, but that the past season had not produced nearly half a crop of surplus honey.

The resolutions laid over from the last meeting to change the name of the Association to "Northern Illinois," and the time for the annual meeting

to the third Tuesday in December, were adopted.

### A Peculiar Queen.

Mr. R. Gammon asked: Can a queen that produces all three-banded workers be a hybrid? He then stated that he bought a queen, and all of her worker-bees were straight three-banded Italians; but all the queens he reared from her were dark, and their bees were hybrids.

Dr. C. C. Miller thought that there might be a taint of impurity in the old queen; or might it not be that all the seven young queens mated?

Mr. Gammon thought that it was impossible for all the young queens to have mated, as all his other queens were purely mated.

### The Chapman Honey-Plant.

Is the Chapman honey valuable enough to occupy tillable ground?

Dr. Miller said that for a honey-plant to be worth anything, it must be able to take care of itself; that he had one-eighth of an acre, and the first year he cared for it well, when it grew and did nicely; but the young plants winter-killed badly. There were a great many bees on the blossoms, but did not work as they do on white clover, but would lie on the blossoms and act stupid. While they were gathering from white clover they went from one blossom to another very lively.

President Highbarger said that all of his Chapman honey-plants winter-killed, except a few plants under a snow-drift. These blossomed, and the bees worked on them well, but he also noticed the slow, stupid action of the bees on the blossoms, and also stated that some worm cut the blossoms off badly. He did not think that he could make it pay to raise it especially for honey.

Mr. E. Whittlesey said that his bees worked well on it, but some worm or insect worked in the stalk, killing it badly.

### Prevention of Second Swarms.

Mr. Gammon said that his plan of preventing second swarms, was to cut out the queen-cells. It worked successfully with him. He kept about 30 colonies.

Mr. Lee said that was his plan, and it was successful. He had 200 colonies.

Dr. Miller asked how many had tried moving the old colony entirely away, putting the new one in its place. He did that way, and succeeded well.

Mr. Stordock used the Heddon plan, and liked it, as it was a success.

Mr. Herrick had tried moving the old colony away, and lost one. He did not try it again.

How many clip their queens' wings? Seven said that they practiced it. Mrs. Woodard said that by clipping the queens' wings she could hive her own bees, and take care of them herself.

The convention then adjourned until Wednesday morning.

### SECOND DAY.

The Wednesday morning session was called to order at 9:45 o'clock, with President Highbarger in the chair.

When should the bees be placed in the cellar for winter? The fact was developed that the members had placed their bees in the cellar from Oct. 25 until Christmas. Some of the members thought that their bees wintered better when placed in the cellar earlier, and disturbed them less.

### Unfinished Sections.

How do you prevent having a large number of unfinished sections in the fall?

Dr. Miller takes the unfinished sections from the weaker, and places them on the stronger colonies.

Mr. Whittlesey takes away the completed sections, places the unfinished ones in one row, and fills the empty space of the super with pieces of board cut to fit it.

Dr. Miller also said that he did not think it advisable to tier up too high, as the bees would commence in all of them; but if doubtful as to their needing more room, he would place the last super on top, instead of under the others.

The next order of business was the election of officers for the ensuing year, and resulted as follows: Leroy Highbarger, of Leaf River, President; A. J. Swezey, of Guilford, Vice-President; O. J. Cummings, of Guilford, Treasurer; and D. A. Fuller, of Cherry Valley, Secretary. The convention returned a vote of thanks to the Supervisor of Winnebago county, for the free use of the Court Room.

It was decided to hold the next meeting on May 21, 1889, at the residence of H. W. Lee, of Pecatonica, Ill.; on Aug. 20, 1889, at the residence of Russel Marsh, of Guilford, Ill.; and the annual at Rockford, Ill., on Dec. 16 and 17, 1889.

On motion, annual dues of the members was made 25 cents per year.

The convention then adjourned.

D. A. FULLER, Sec.

**Send Us the Names** of bee-keepers in your neighborhood who should take and read the AMERICAN BEE JOURNAL, and we will send them a sample copy. In this way we may obtain many regular subscribers, for thousands have never seen a copy, or even know of its existence. This is one way to help the cause along.

### CONVENTION DIRECTORY.

1889. Time and Place of Meeting.

May 1, 2.—Texas State, at Greenville, Tex.  
G. A. Wilson, Sec., McKinney, Tex.

May 4.—Susquehanna County, at Montrose, Pa.  
H. M. Seeley, Sec., Harford, Pa.

May 21.—Northern Illinois, at Pecatonica, Ill.  
D. A. Fuller, Sec., Cherry Valley, Ills.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

### SELECTIONS FROM OUR LETTER BOX

**Bees Wintering Splendidly.**—L. D. Cheasbro, Conway, Iowa, on Feb. 2, 1889, writes:

Bees are wintering the best I ever saw them. Last spring I had 6 colonies, increased them to 24, and obtained 600 pounds of first class comb honey in one-pound sections. I sold it here at 15 cents per pound. We had no honey-flow until September. White clover and basswood was a failure. My bees are all taking a flight to-day. I examined all of them, and I find more honey in the hives to-day than I ever saw before at this time of the year. It has been so warm this winter that I have not put them into the cave, but left them on the summer stands.

**Proper Width of Hives.**—G. Kelly, Kalamazoo, Mich., on Feb. 1, 1889, writes:

1. What is the proper width for a hive to contain 8 brood-frames? 2. Is  $\frac{3}{4}$  of an inch enough space between the bottom of the frames and bottom-boards?

[1. A hive to contain 8 brood-frames should be 12 inches wide, inside. 2. The space at the bottom of the frames should be not less than one-half inch.—ED.]

**Producing Comb Honey.**—D. W. Dougherty, Springwater, N. Y., on Jan. 21, 1889, says:

I appreciate the efforts of the editor of the BEE JOURNAL for the cause of bee-keeping. We cannot work successfully without the press, one of whose most honorable members is the AMERICAN BEE JOURNAL. The season of 1888 in this part of the country was a poor one, owing mostly to dry weather. I had a small increase, and but little honey from my apiary. I work entirely for comb honey, the tiering-up method being practiced.

**Successful Cellar Wintering.**—A. J. Duncan, Hartford, Iowa, on Feb. 1, 1889, writes:

The past two years have been the poorest for honey that I have experienced since I have been keeping bees. Last year I took 30 pounds of honey per colony, spring count, some of it being comb honey, but mostly extracted. In 1887 I took 25 pounds per colony, but in 1886 I took 150 pounds per colony, spring count, but I had full combs below and above to hive the swarms on. I never extract from the homestead. I have wintered my bees very successfully for the last several winters in a cellar under the

sitting-room of my house, where the fire never goes out in the winter-time. The cellar is 16x24 feet, outside measure, and 7 feet deep in the clear, ventilated by a 7-inch thimble in the stove-flue, which commences on the cellar bottom. The cellar is very dry. A room is partitioned off large enough to hold the bees, and a good thermometer is hung up against the partition which registers as low as 32° for several days at a time, though vegetables do not freeze. My bees are the most quiet at between 32° and 40°. I had my 48 colonies all prepared to put into the cellar last fall, when my wife was taken sick, and so very nervous that we had to walk on tiptoe, and talk in a whisper. She has been sick nearly ten weeks, but is a little better now; consequently the bees are on the summer stands not very well protected, and I fear that some of them have not enough stores for out-door wintering. I label every package of honey, and sell it in the home market.

**Bees are Quiet—Mild Winter.**—E. W. Councilman, Newark, N. Y., on Jan. 20, 1889, writes:

I have 76 colonies of bees in the cellar, seemingly in good condition, but, like all the rest, last fall my bees did not do well, as I got only 1,000 pounds of surplus honey from the whole business, and not enough increase to make up for previous spring losses. The winter has been very mild, and bees have seemed remarkably quiet in their winter quarters, and thus far but two quarts of dead bees have been swept up from the cellar-bottom, seemingly but a titling of previous years, up to this date; so by this I think that the prospect is excellent for colonies to come through the winter in a strong condition.

**A Delightful Climate.**—Mr. John Boerstler, Vashon, Wash. Ter., on Jan. 23, 1889, says:

We have had spring weather all this winter, and not any snow or ice. We have been plowing all along from Christmas up to this time, and are making garden right along. This is the best climate that I ever saw—it is nearly like California. Peaches are already budding, and flowers are in bloom all winter. I am looking for 1,000 emigrants from the East in the spring. I cannot see how they can help coming out West, with the climate we have here. Bees are all right yet. They are flying every few days, and the prospects are good for fruit this year.

**Wild Bees.**—O. C. Becker, East Saginaw, Mich., on Feb. 4, 1889, writes:

During July and August, I take my summer vacation on the Shore of Lake Huron, where there are wild bees. I have caught them, and put them into a box with honey, when they would fill themselves, leave, and not return. Does any one know of anything that they (the bees) will work on, when there are flowers in bloom? I concluded that nothing could be done in finding bee-trees until after the frosts came.

**Bee-Cellars—New System.**—R. S. Becktell, Three Oaks, Mich., on Feb. 4, 1889, writes:

The season of 1888 was the poorest that I have seen here in my 17 years' experience with bees. I generally get 20 to 100 pounds of comb honey per colony, but last season I got nothing from 200 colonies. The most of the colonies obtained enough honey for winter, but I will have to feed some in April. I have 175 colonies of bees in the



cellar under my house; it is 12x30 feet. I have kept it at 45° to 50°, except once when it was 52°. The temperature keeps rising when there is but little ventilation to the cellar. Why is this? I think that it is only natural that the bees would gradually raise the temperature, especially after breeding begins, and the thermometer outside indicates only 20° to 45°.

Dr. Tinker's new method of working bees for comb honey, described on page 25, I think will not work. The bees will only average 40 pounds of honey per colony, and his second brood-chamber will hold that amount, which would have to be extracted; and his half-filled brood-frames would be filled too much with brood-comb, etc.

### No Surplus Honey for 2 Years.

—Rev. John Hunt, Plain City, O., on Jan. 29, 1889, writes as follows:

My account of the bee-business in this region is not encouraging; for the last two years it has been a failure. During that time I have received no surplus honey, and have been obliged to feed with sugar syrup. I had 17 colonies in the fall, but not any of them being strong, I reduced them to 9 by uniting. I am hoping in this way to have a better chance to carry them through the winter. Thus far they appear to be doing well. This winter has been mild and open, and I think that it is favorable for the bees. My neighbor bee-keepers are not doing much better than myself. We hope that the next season will witness a revival of the white clover, which has been killed out by the severity of the weather in time past, or some other cause. I rejoice that there is sufficient enterprise to maintain a weekly bee-paper in the interest of apiculture.

**Bees Quiet in the Cellar.**—C. G. Ridout, Hutchinson, Minn., on Jan. 24, says:

I began in the spring of 1888 with 5 fair colonies, increased them to 12, and obtained 500 pounds of light comb honey, nearly all clover and linden. The 12 colonies this fall which I put into the cellar, were all strong, and had plenty of stores, more than they needed, I think; but I would rather they would have too much than not enough, which is frequently the case with many.

I would like to ask a question, viz: The winter in this section has been unusually warm, and my bees were put into the cellar early last fall. So long as they remain quiet is it best to leave them undisturbed in the cellar, or should they be given a flight?

[Do not disturb them unless they become restless.—ED.]

**Feeding Bees in Winter.**—Geo. W. Ogden, De Kalb, Mo., Jan. 29, writes:

The last year has been a hard one, but we must try again. I shall, at least. I have 20 colonies flying to-day. They are on the summer stands. I tried the cellar last winter, and I cannot say that I prefer it. I think that if bees have plenty of honey or syrup, they will be all right in this State. At least 25 per cent. of the bees in this county will starve. I have fed lots of bees during the last 30 days, for my neighbors. They all have the Langstroth hives. I turn the syrup into the empty combs, from 5 to 10 pounds to the colony, in a few minutes. I have kept bees for 25 years, and have not lost any money by it yet, but 1887 and 1888 were poor seasons with me. I got 150 pounds of honey last year, and 2 swarms, and lost 10 colonies by starvation in August. I put 27 colonies out of the cellar last March. The bee-keepers are going to organize on Feb. 2, at Agency, in this county.



ALFRED H. NEWMAN,  
BUSINESS MANAGER.

## Business Notices.

**If You Live** near one post-office and get your mail at another, be sure to give the address that we have on our list.

**Give a Copy of "Honey as Food and Medicine"** to every one who buys a package of honey. It will sell lots of it.

**Dr. Miller's Book, "A Year Among the Bees,"** and the AMERICAN BEE JOURNAL for one year—we send both for \$1.50.

**If you Lose Money** by carelessly enclosing it in a letter, it is without excuse, when a Money Order, which is perfectly safe, costs but 5 cents.

**New Subscribers** can obtain the full numbers for 1888 and 1889 for \$1.80, if application be made at once, before all the sets of 1888 are gone.

**Paper Boxes**—to hold a section of honey for retail dealers. We have two sizes on hand to carry sections 4¼x4¼ and 5¼x5¼. Price, \$1.00 per 100, or \$8.50 per 1,000.

**Preserve Your Papers** for future reference. If you have no **BINDER** we will mail you one for 60 cents; or you can have one **FREE**, if you will send us 3 new yearly subscriptions for the BEE JOURNAL.

**Please write American Bee Journal** on the envelope when writing to this office. Several of our letters have already gone to another firm (a commission house), causing vexatious delay and trouble.

**Honey.**—We have for sale a quantity of Extracted Honey in kegs holding about 220 pounds each, which we are selling, free on board the cars, at 8 cents per pound for Amber and 9 cents per pound for White.

**In order to pay** you for getting new subscribers to send with your renewal, we make you this offer. For each yearly subscriber, with \$1.00, you may order 25 cents worth of any books or supplies that we have for sale—as a premium.

**Apiary Register.**—All who intend to be systematic in their work in the apiary, should get a copy of the Apiary Register and begin to use it. The prices are as follows:

For 50 colonies (120 pages) .....	\$1 00
" 100 colonies (220 pages) .....	1 25
" 200 colonies (420 pages) .....	1 50

**Red Labels for Pails.**—We have three sizes of these Labels ranging in size for pails to hold from one to ten pounds of honey. Price, \$1 for a hundred, with the name and address of the bee-keeper printed on them. Smaller quantities at one cent each; but we cannot print the name and address on less than 100. Larger quantities according to size, as follows:

	Size A.	Size B.	Size C.
250 Labels.....	\$1.50	\$2.00	\$2.25
500 Labels.....	2 00	3.00	3.50
1,000 Labels.....	3.00	4.00	5.00

✂ Samples mailed free, upon application.

**Alfalfa Clover.**—For cultivation of this honey-plant, see page 245, of 1888.—We supply the seed at the following prices: —Per lb., 22c.; per peck, \$3.00; per half-bushel, \$5.50; per bushel of 60 lb., \$10.00. If wanted by mail, add 10 cents per pound for bag and postage.

**Always Mention** your Post-Office, County and State when writing to this office. No matter where you may happen to be for the hour when actually writing—never mention anything but your permanent address. To do otherwise leads to confusion, unless you desire your address changed. In that case state the old as well as the new address.

**Money in Potatoes,** by Mr. Joseph Greiner. Price, 25 cents, postpaid. This is a complete instructor for the practical potato-grower, and explains the author's new system in 40 interesting lessons. It is for sale at this office.

**Pure Phenol for Foul Brood.**—Calvert's No. 1 phenol, mentioned in *Cheshire's* pamphlet on pages 16 and 17, can be procured at this office at 25 cents per ounce. Not being mailable, it must go by express.

**Yucca Brushes,** for removing bees from the combs, are a soft, vegetable fiber, and do not irritate the bees. We supply them at 5 cents each, or 50 cents a dozen; if sent by mail, add 1 cent each for postage.

**We will Present** a Pocket Dictionary for two subscribers with \$2.00. It is always useful to have a dictionary at hand to decide the spelling of words, and their meaning.

**Simmins' Non-Swarming System,** and the AMERICAN BEE JOURNAL for one year, for \$1.25. The subscription to the BEE JOURNAL may begin anew at any time.

**We Supply Chapman Honey-Plant SEED** at the following prices: One ounce, 40 cents; 4 ounces, \$1; ¼ pound, \$1.75; 1 pound, \$3. One pound of seed is sufficient for half an acre, if properly thinned out and re-set.

**Good Enough.**—Andrews & Lockhart, of Patten's Mills, N. Y., on Oct. 13, 1888, wrote as follows concerning their use of the advertising columns of the AMERICAN BEE JOURNAL:

We got more orders from our advertisement in the AMERICAN BEE JOURNAL than from all the other bee-papers put together.

## CLUBBING LIST.

We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the *American Bee Journal* must be sent with each order for another paper or book:

	Price of both.	Club
The <i>American Bee Journal</i> .....	1 00	...
and Gleanings in Bee-Culture.....	2 00	1 75
Bee-Keepers' Magazine.....	1 50	1 40
Bee-Keepers' Guide.....	1 50	1 40
Bee-Keepers' Review.....	1 50	1 40
The Apiculturist.....	1 75	1 65
Canadian Bee Journal.....	2 00	1 80
Canadian Honey Producer.....	1 40	1 30
The 8 above-named papers..	5 65	5 00
and Cook's Manual (old edition).....	2 25	2 00
Bees and Honey (Newman).....	2 00	1 75
Binder for Am. Bee Journal.....	1 60	1 50
Dzierzon's Bee-Book (cloth).....	3 00	2 00
Root's A B C of Bee-Culture.....	2 25	2 10
Farmer's Account Book.....	4 00	2 20
Western World Guide.....	1 50	1 30
Heddon's book, "Success,".....	1 50	1 40
A Year Among the Bees.....	1 75	1 50
Convention Hand-Book.....	1 50	1 30
Weekly Inter-Ocean.....	2 00	1 75
How to Propagate Fruit.....	1 50	1 25
History of National Society.....	1 50	1 25

Do not send to us for sample copies of any other papers. Send for such to the publishers of the papers you want.

Catalogues for 1889 are on our desk from—

Wm. W. Cary & Co., Coleraine, Mass.—36 pages—Italian Bees and Apian Supplies.

F. A. Snell, Milledgeville, Ills.—16 pages—Apian Supplies, Italian Bees, etc.

Frank A. Eaton, Bluffton, O.—16 pages—Italian Bees and Queens, and High Class White Fowls.

Jno. Nebel & Son, High Hill, Mo.—8 pages—Italian Bees, Queens and Bee-Keepers' Supplies.

Dr. J. P. H. Brown, Augusta, Ga.—4 pages—Italian Queens and Bees, and Apian Supplies.

Andrews & Lockhart, Patten's Mills, N. Y.—8 pages—Carniolan Bees and Queens.

Jos. E. Shaver, Friedens, Va.—24 pages—Bee-Keepers' Supplies.

Childs & Jones, Utica, N. Y.—52 pages—Cheese Factory, Creamery and Dairy Apparatus and Supplies.

**Core's Farm Accountant** is a pocket-book of 64 pages published by Arthur S. Core, 170 Front St., New York. It is intended for keeping a correct data of the entire farm, the product of each crop as well as the animals. There are also valuable hints on farm labor, poultry, foods for milk and fat producing, butter, pasturing and soiling, light and heavy soils, apple, peach and berry culture, substances taken from the soil, etc.

## International Bee-Convention.

—The Pamphlet Report of the Columbus, Ohio, Bee-Convention can be obtained at this office, by mail, postpaid, for 25 cents. This pamphlet contains the new bee-songs and words, as well as a portrait of the President. Bound up with the history of the International Society, and a full report of the Detroit, Indianapolis and Chicago conventions, for 50 cents, postpaid.

## Honey and Beeswax Market.

## SAN FRANCISCO.

HONEY.—White comb, 10¢@11¢; dark, 8¢@9¢. White extracted, 6¢; light amber, 5¢@6¢; dark amber, 4¢@5¢.

BEESWAX.—18¢@22¢. Jan. 25. O. B. SMITH & CO., 423 Front St.

## BOSTON.

HONEY.—We quote: Best white clover 1-pounds, 17¢@18¢; best 2-lbs., 16¢@17¢. Extracted, 8¢@9¢. The trade is dull.

Jan. 19. BLAKE & RIPLEY, 57 Chatham Street.

## DETROIT.

HONEY.—Best white 1-lbs., 16¢@18¢. Supply is not large, but about equal to the demand. Market will be bare of comb honey long before the new crop is ready.

BEESWAX.—22¢@23¢. Jan. 18. M. H. HUNT, Bell Branch, Mich.

## CHICAGO.

HONEY.—We quote: White clover 1-lbs., 16¢@17¢; 2-lbs., 14¢@15¢. Good dark 1-lbs., 13¢@14¢; 2-lbs., 12¢@13¢. Buckwheat 1-lbs., 18¢@19¢; 2-lbs., 11¢@11¢. Extracted, 8¢@9¢, depending upon quality and style of package. Market dull and stock sells slowly.

BEESWAX.—22¢. Jan. 24. B. T. FISH & CO., 189 S. Water St.

## ST. LOUIS.

HONEY.—Choice white clover comb, 13¢@15¢; fair 11¢@12¢; dark, 8¢@10¢. Extracted, dark, in barrels, 5¢@5¢; choice, 5¢@6¢; in cans, 6¢@7¢. Market is quiet but steady.

BEESWAX.—20¢, for prime. Jan. 17. D. G. TUTT & CO., Commercial St.

## CHICAGO.

HONEY.—Best 1-lbs., 17¢@18¢. Extracted, 7¢@9¢. for best quality, according to body, flavor and style of package. Trade is limited to local consumption. Off grades of comb honey are slow at lower figures than given above. But few will buy dark comb.

BEESWAX.—22¢. R. A. BURNETT, 161 South Water St.

## MILWAUKEE.

HONEY.—We quote: Fancy white 1-lbs., 17¢@18¢; 2-lbs., 15¢@16¢. Good dark 1-lbs., 15¢@16¢; 2-lbs., 14¢@15¢; fair 1-lbs., 12¢@14¢. Extracted, white, in kegs and 5¢-barrels, 8¢@9¢; amber in same, 7¢@8¢; in pails and tin, white, 9¢@10¢; in barrels and 5¢-barrels, dark, 5¢@6¢. Market dull. The very best sells slowly, and inferior qualities are neglected very much. Damaged, broken and leaky comb honey not wanted.

BEESWAX.—22¢@23¢. Jan. 10. A. V. BISHOP, 142 W. Water St.

## CINCINNATI.

HONEY.—We quote extracted at 5¢@8¢ per lb. Best white comb honey, 12¢@16¢. Demand slow, with a smaller supply than ever at this season for the past 10 years.

BEESWAX.—Demand is good—20¢@22¢ per lb. for good to choice yellow, on arrival.

Jan. 9. C. F. MUTH & SON, Freeman & Central Av.

## KANSAS CITY.

HONEY.—White 1-lbs., 16¢; fair, 14¢; California 1-lbs., 16¢; white 2-lbs., 14¢; extra 2-lbs., 13¢. Extracted, white California, 8¢; amber, 7¢. Market dull.

BEESWAX.—20¢@22¢. Jan. 22. CLEMONS, CLOON & CO., cor 4th & Walnut

## KANSAS CITY.

HONEY.—Choice 1-pounds, 15¢@16¢; dark 1-lbs., 12¢; 2-lbs., 14¢; dark, 11¢. White extracted in 60-lb. cans, 8¢; amber, 7¢; in barrels and kegs, 5¢@8¢. Demand good, prices steady, and stock large.

BEESWAX.—None in market. Jan. 4. HAMBLEN & BEARSS, 514 Walnut St.

## DENVER.

HONEY.—White, in 1-lb. sections, 15¢@16¢. Extracted, 9¢@10¢.

BEESWAX.—20¢. Jan. 1. J. M. CLARK & CO., 1409 Fifteenth St.

## NEW YORK.

HONEY.—We quote: Fancy white 1-lbs., 14¢@15¢; 2-lbs., 12¢. Fair white 1-lbs., 14¢@15¢; 2-lbs., 10¢@11¢. Buckwheat 1-lbs., 10¢@11¢; 2-lbs., 9¢@10¢. Extracted, white, 7¢@8¢; dark buckwheat, 6¢@7¢, which is in good demand. Market dull, except for extracted buckwheat; for all other kinds it is quiet, owing to unseasonable weather, we believe.

HILDRETH BROS. & SEGELKEN, 28 & 30 W. Broadway, near Duane St.

## SAN FRANCISCO.

HONEY.—We quote: Extracted, white, 6¢ cents; amber, 6¢. Comb, white 1-lbs., 13¢@14¢; 2-lbs., 13¢; amber, 10¢@11¢. Demand is of a jobbing nature, and arrivals are small.

BEESWAX.—19¢@20¢. Jan. 8. SCHACHT, LEMCKE & STEINER, 16 & 18 Drumm St.

Your Full Address, plainly written, is very essential in order to avoid mistakes.

## Convention Notices.

There will be a meeting of the Susquehanna County Bee-Keepers' Association at the Court House in Montrose, Pa., on Saturday, May 4, 1889, at 10 a.m. H. M. SEELEY, Sec.

The 11th annual session of the Texas State Bee-Keepers' Association will be held in the apiary of W. R. Graham, of Greenville, Hunt Co., Tex., on May 1 and 2, 1889. All bee-keepers are invited. The last meeting was held here last May, and was the best ever held. So we look forward to a good time next May. A cordial welcome and hospitality will be tendered to all who come. G. A. WILSON, Sec.

**Clover Seeds.**—We are selling *Alsike Clover Seed* at the following prices: \$8.00 per bushel; \$2.25 per peck; 25 cents per lb. *White Clover Seed*: \$10.00 per bushel; \$3.75 per peck; 30 cents per lb. *Melilot or Sweet Clover Seed*: \$6.00 per bushel; \$1.75 per peck; 20 cents per lb.—by express or freight.

## Advertisements.

## 1889. Italian Queens. 1889.

HAVING moved 8 miles from Nicholasville, to a better location for BEES I will engage in Queen-Rearing more extensively than formerly. I have the very best ITALIANS only. Prices:

Select Tested Queens, in April, \$3; in May, \$2.50; in June, \$2.00; July to November, \$1.50. Queens warranted purely mated, \$1.00; 6 for \$5.00.

Make Money Orders payable at Nicholasville. Send for Circular. Address,

J. T. WILSON,

7D1f LITTLE HICKMAN, Jessamine Co., KY.

Mention the *American Bee Journal*.

## SECTION PRESS

PRICE, \$2.00.



FOR putting together one-piece sections. Every section square, and a smart boy or girl can fold 100 in six minutes. Try one and you will never regret it. Send to your supply dealer, or to

WAKEMAN & CROCKER, Lockport, N. Y.

7A28f Mention the *American Bee Journal*.

## MISTAKES.

IN the BEE-KEEPERS' REVIEW for February, the veterans "own up" to the mistakes they have made, and point out those being made at present by other bee-keepers. This Number also has a long article from Byron Walker, showing how bees may be obtained, in the spring, very cheaply, and in large quantities, from the South.

Price of the REVIEW, 50 cts. a year. Samples free. Back numbers furnished.

## "The Production of Comb Honey"

Is a neat little book of 45 pages; price, 25 cts. This book, and the REVIEW for one year, for 65 cts. For \$1.00 the REVIEW will be sent two years and the book thrown in. Stamps taken, either U. S. or Canadian.

Address, W. Z. HUTCHINSON,

7A1t 613 Wood St., FLINT, MICHIGAN.

Mention the *American Bee Journal*.

**SEEDS FREE!** Until March 10th will send New Cat. and 6 sample packets choicest Seeds for Ten cts. Parsley, 50 vars. Double Asters, 35 vars. Price Sweet Williams, 50 vars. Spotted Petunias, &c. (worth 55c.). **GOODELL'S FLOWER FARM**, Pansy Park, Dwight P. O., Mass.

Mention the *American Bee Journal*.